

## FACT SHEET

as required by LAC 33:IX.2411, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0047180; AI 19261; PER20060001** to discharge to waters of the State of Louisiana as per LAC 33:IX.2311.

The permitting authority for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

I.           **THE APPLICANT IS:** City of Slidell  
Terrace Avenue Wastewater Treatment Plant  
P.O. Box 828  
Slidell, LA 70459

II.           **PREPARED BY:** Angela Marse

**DATE PREPARED:** April 25, 2007

III.           **PERMIT ACTION:** LPDES permit LA0047180, AI19261

LPDES application received:      October 5, 2006

LPDES permit issued:              November 1, 2001

LPDES permit expired:             October 31, 2006

## IV.           **FACILITY INFORMATION:**

A.            The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the City of Slidell and Sewer District No. 7.

B.            The permit application does indicate the receipt of industrial wastewater. However, there are no pretreatment categorical standards for the indirect dischargers or the indirect discharge consisted of sanitary wastewater only.

C.            The facility is located at 2800 Terrace Avenue in Slidell, St. Tammany Parish.

D.            The treatment facility consists of primary clarifiers, aeration, and secondary clarifiers. The sludge handling system consists of two anaerobic digesters, belt filter press and thickener. Disinfection is by chlorination.

### E.            Outfall 001

Discharge Location:	Latitude	30° 15' 58" North
	Longitude	89° 46' 15" West

Description:                      treated sanitary wastewater

Design Capacity:                6 MGD

Type of Flow Measurement which the facility is currently using:

Totalizing Meter

**V. RECEIVING WATERS:**

The discharge is by effluent pipe into W-14 Canal, thence into Salt Bayou, thence into Lake Pontchartrain in segment 040909 of the Lake Pontchartrain Basin. This segment is listed on the 303(d) list of impaired waterbodies.

The critical low flow (7Q10) of Salt Bayou is 83.3 cfs based on a report from Max Forbes, April 28, 2000.

The hardness value is 867mg/l and the fifteenth percentile value for TSS is 9mg/l. This data, for Salt Bayou, is based on DEQ Station #035 (Pass Rigolets, southeast of Slidell) and included in the report from Max Forbes dated April 28, 2000.

The designated uses and degree of support for Segment 040909 of the Lake Pontchartrain Basin are as indicated in the table below<sup>1/</sup>:

Overall Degree of Support for Segment	Degree of Support of Each Use						
Partial	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
	Not Supported	Not Supported	Full	N/A	N/A	N/A	N/A

<sup>1/</sup> The designated uses and degree of support for Segment 040909 of the Lake Pontchartrain Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

Section 303 (d) of the Clean Water Act as amended by the Water Quality Act of 1987, and EPA's regulations at 40 CFR 130 require that each state identify those waters within its boundaries not meeting water quality standards. The Clean Water Act further requires states to implement plans to address impairments. LDEQ is developing Total Maximum Daily Loadings Studies (TMDLs) to address impaired waterbodies. Segment 040909 of the Lake Pontchartrain Basin is on the 2004 Integrated 303(d) List of Impaired Waterbodies. The suspected cause of impairment is pathogen indicators. To date no TMDLs have been completed for this waterbody.

Monitoring for fecal coliform is the best indicator for the potential presence of pathogenic organisms in wastewater. To protect against potential receiving water impairments due to pathogens, fecal coliform limits have been established in the permit. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements if imposed by the TMDL.

**VI. ENDANGERED SPECIES:**

The receiving waterbody, Subsegment 040909 of the Lake Pontchartrain Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated September 29, 2006 from Watson (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered species or candidate species or their critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

**VII. HISTORIC SITES:**

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

**VIII. PUBLIC NOTICE:**

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit modification and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation  
Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mrs. Angela Marse  
Permits Division  
Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

**IX. PROPOSED PERMIT LIMITS:****OUTFALL 001**

The permit application indicated no changes in operation since the issuance of the previous permit. Since no TMDL or other studies have been conducted for the City of Slidell or Subsegment 040909, the effluent limits in the proposed permit are based on the previous permit and the Wasteload Allocation for the City of Slidell's Municipal Wastewater Treatment Facilities.

**Final Effluent Limits for April through October:**

Final limits shall become effective the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
CBOD <sub>5</sub>	500	10 mg/l	15 mg/l	Limits are set in accordance with the Wasteload Allocation for the City of Slidell's Wastewater Treatment Facilities dated October, 1984 and subsequent Update to the Water Quality Management Plan dated July, 1987.
TSS	751	15 mg/l	23 mg/l	Limits are set in accordance with the Wasteload Allocation for the City of Slidell's Wastewater Treatment Facilities dated October, 1984 and subsequent Update to the Water Quality Management Plan dated July, 1987.
Ammonia-Nitrogen	200	4 mg/l	8 mg/l	Previous permit effluent limitations.
Dissolved Oxygen	N/A	5 mg/l	N/A	Limits are set in accordance with the Wasteload Allocation for the City of Slidell's Wastewater Treatment Facilities dated October, 1984 and subsequent Update to the Water Quality Management Plan dated July, 1987.

**\*\*This Dissolved Oxygen limit is the lowest allowable average of daily discharges over a calendar month. When monitoring is conducted, the Dissolved Oxygen shall be analyzed immediately, as per 40 CFR 136.3.**

**Other Effluent Limitations:****1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional

Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) **pH**

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C, the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) **Solids and Foam**

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

**Final Effluent Limits for November through March:**

Final limits shall become effective the effective date of the permit and expire on the expiration date of the permit.

<b>Effluent Characteristic</b>	<b>Monthly Avg. (lbs./day)</b>	<b>Monthly Avg.</b>	<b>Weekly Avg.</b>	<b>Basis</b>
BOD <sub>5</sub>	1000	20 mg/l	30 mg/l	Limits are set in accordance with the Wasteload Allocation for the City of Slidell's Wastewater Treatment Facilities dated October, 1984 and subsequent Update to the Water Quality Management Plan dated July, 1987.
TSS	1000	20 mg/l	30 mg/l	Limits are set in accordance with the Wasteload Allocation for the City of Slidell's Wastewater Treatment Facilities dated October, 1984 and subsequent Update to the Water Quality Management Plan dated July, 1987.
Ammonia-Nitrogen	200	4 mg/l	8 mg/l	Previous permit effluent limitations.
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**\*\*This Dissolved Oxygen limit is the lowest allowable average of daily discharges over a calendar month. When monitoring is conducted, the Dissolved Oxygen shall be analyzed immediately, as per 40 CFR 136.3.**

**Other Effluent Limitations:**

**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

**2) pH**

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C, the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

**3) Solids and Foam**

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

**Toxicity Characteristics**

Based on information contained in the permit application, LDEQ has determined there may be pollutants present in the effluent which may have the potential to cause toxic conditions in the receiving stream in violation of Section 101(a)(3) of the Clean Water Act. The State has established a narrative criteria which, in part, states that 'No substances shall be present in the waters of the State or the sediments underlying said waters in quantities alone or in combination will be toxic to human, plant, or animal life ...' (LAC 33:IX.1113.B.5).

Whole effluent biomonitoring is the most direct measure of potential toxicity which incorporates the effects of synergism of the effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity. LAC 33:IX.1121.B.3. provides for the use of biomonitoring to monitor the effluent for protection of State waters. The biomonitoring procedures stipulated as a condition of this permit are as follows:

The permittee shall submit the results of any biomonitoring testings performed in accordance with the LPDES Permit No LA0047180 Section E for the organisms indicated on the following page.

TOXICITY TESTSFREQUENCY

Chronic static renewal 7-day survival &amp; reproduction test

1/quarter

using *Menidia beryllina*

Chronic static renewal 7-day survival &amp; growth test

1/quarter

using *Mysidopsis bahia*

Dilution Series - The permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional concentrations shall be 4%, 6%, 8%, 10%, and 13%. The low-flow effluent concentration (critical low-flow dilution) is defined as 10% effluent. The critical dilution is calculated in Appendix B-1 of this fact sheet. Results of all dilutions shall be documented in a full report according to the test method publication mentioned in the **Biomonitoring Section E** under Whole Effluent Toxicity. This full report shall be submitted to the Office of Environmental Compliance as contained in the Reporting Paragraph located in the **Biomonitoring Section E** of the permit.

## X.

PREVIOUS PERMITS:

LPDES Permit No. LA0047180: Issued: November 1, 2001

Expired: October 31, 2006

**April-October**

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Daily Avg.</u>	<u>Daily Max.</u>	<u>Measurement</u>	<u>Sample</u>
			<u>Frequency</u>	<u>Type</u>
Flow	Report	Report	Continuous	Recorder
CBOD <sub>5</sub>	10 mg/l	15 mg/l	5/week	12-hr composite
TSS	15 mg/l	23 mg/l	5/week	12-hr composite
Ammonia-Nitrogen	4 mg/l	8 mg/l	5/week	12-hr composite
Dissolved oxygen	5 mg/l	---	5/week	Grab
Fecal Coliform Colonies	200	400	5/week	Grab

**November-March**

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Daily Avg.</u>	<u>Daily Max.</u>	<u>Measurement</u>	<u>Sample</u>
			<u>Frequency</u>	<u>Type</u>
Flow	Report	Report	Continuous	Recorder
BOD <sub>5</sub>	20 mg/l	30 mg/l	5/week	12-hr composite
TSS	20 mg/l	30 mg/l	5/week	12-hr composite
Ammonia nitrogen	4 mg/l	8 mg/l	5/week	12-hr composite
Dissolved oxygen	5 mg/l	---	5/week	Grab
Fecal Coliform Colonies	200	400	5/week	Grab

The permit contains pretreatment language.

The permit contains biomonitoring.

The permit contains pollution prevention language.

**XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:**

**A) Inspections**

A review of the files indicates the following inspections were performed for this facility:

Date - February 3, 2006

Inspector - LDEQ

Findings and/or Violations -

1. Facility has returned to pre-Katrina conditions (except for population served).

Date - June 16, 2005

Inspector - LDEQ

Findings and/or Violations -

1. Facility experiences inflow and infiltration problems during heavy rainfall events.

**B) Compliance and/or Administrative Orders**

A review of the files indicates the following most recent enforcement actions administered against this facility:

**LDEQ Issuance:**

Docket # - WE-CN-02-0926A

Date Issued - November 18, 2004

Findings of Fact:

1. Respondent did cause or allow the discharge of untreated sanitary wastewater on 61 occasions from the sewer treatment plant or various lift stations since June, 2001.
2. Incorporated previous compliance orders.

**C) DMR Review**

A review of the discharge monitoring reports for the period beginning November, 2004 through October, 2006 revealed no effluent violations reported on the DMRs. However, the following violations of the permit were reported:

13 overflows

5 bypasses



**XII. ADDITIONAL INFORMATION:**

Please be aware that the Department will be conducting a TMDL in the Lake Ponchartrain Basin scheduled for completion in 2011. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions as a result of the TMDL. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 6.0 MGD.

Effluent loadings are calculated using the following example:

BOD:  $8.34 \text{ gal/lb} \times 6.0 \text{ MGD} \times 10 \text{ mg/l} = 500 \text{ lb/day}$

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 5 and 10 MGD.

**STORMWATER PROVISIONS**

The requirements of Part II, Section B apply to stormwater discharges associated with industrial activity as defined at LAC 33:IX.2511.B.14.i and Sector T of the LDPES Multi-Sector Stormwater Permit LAR5000. These requirements apply to point source stormwater discharges associated with domestic sewage treatment works with a design flow of 1 MGD or more. The City of Slidell, Terrace Avenue Wastewater Treatment Plant's design capacity is 6 MGD. Therefore, the City of Slidell will also be required to develop a Stormwater Pollution Prevention Plan for the Terrace Avenue Wastewater Treatment Plant to be effective six months from the effective date of the permit.

**Pretreatment Requirements**

Based upon consultation with LDEQ pretreatment personnel, standard pretreatment language has been included in the permit. This language is for facilities that do not have either an approved or required pretreatment programs.

**XIII. TENTATIVE DETERMINATION:**

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

XIV

REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards", Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program", Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, City of Slidell, Terrace Avenue Wastewater Treatment Plant, October 5, 2006.